TIFFANY STAR

CONTENTS

WHAT IN THE STARS
by Mike Mikesh

Thank you to Joe Fugate for the magnificent HIWG ads in Travellers' Digest.

Product news: Flashback and Second Survey are cancelled in favor of Rebellion related adventures. Deneb Sourcebook is pending, and will probably be released as a DGP product. Grand Explorations is now a book of exploration adventures cum source material. The next GDW release for MegaTraveller will probably be Knightfall, the first of a related series of Rebellion adventure books in the tradition of The Traveller Adventure and Sky Raiders trilogy.

Knightfall - Rebellion Anthology Volume 1
While conducting some routine trade in Hassilia sector, the world you are on is suddenly overrun by Lucan's forces in a surprise assault from orbit. Now prisoners of war with your starship confiscated, you must escape the grip of Lucan's forces and track down your missing starship. During your search for your lost ship, you stumble upon an amazing discovery that could put an end to this cursed rebellion once and for all ...

Incidentally, wardship of Traveller has been quietly moving from GDW to the hands of DGP. Its still Marc Miller's game, and GDW owns it. But the defacto authority any more is DGP. Marc's confidence in DGP is such that he really doesn't have to review anything that's gone to Boise first. So, most of the dialogue these days, between HIWG and the designers, is with Joe Fugate instead of Marc.

Chances are good James Holden will become a contributing editor to Digest for a new column. Source information for each sector will likely be expanded to include a discussion of Rebellion involvements in that area. This will open opportunities for adoption of HIWG literature into official press.

James also suggested an excellent reference to those working on the Hassilia Project. White Dwarf #89 "Friends in High Places" and #98 "Scenes From Courtly Life," both writting by Simon Nicholson, involves excellent material regarding interplay among nobles and noble houses applicable enough for Traveller.

The adventure in Challenge #38, "Courier," went to press before it could benefit from Phil Athan's work in these pages. However, "The Invasion of Corridor" remains a very useful document.

If you can get onto the GEnie computer net, do it. Marc and Joe are actively involved in the rich bulletin board discussions. DGP has announced plans for a series of on-line adventure playtests. Sector data and pre-publication material is up in the RP library for review. Get involved in product development. And you can send electronic mail direct to many HIWGers, including ED EDWARDS!

CHAIRSOPHONT

Dear Fellow TRAVELLER:

Two new influences will greatly enhanse the future of HIWG: GEnie and the release of SECOND SURVEY (SS) data.

GEnie

GEnie is the Bulletin Board Service (BBS) of General Electric. There are now about 150,000 members of GEnie, so it is not a trivial BBS likely to fold soon. Some 15% of HIWGers are aleady members of GEnie. Each HIWGer might consider wether or not they can or should join GEnie. About half the HIWGers probably could enhanse their HIWGing if they joined.

The following groups cannot join GEnie profitably:

   (a) those with no computer
   (b) U.K. HIWGers;
   (c) APO/FPO HIWGers (it is hard to run a line out to a ship at sea!)
   (d) rural area HIWGers (long-distance phoning is required, making connection with GEnie expensive.)

Except for the most wealthy HIWGers, one needs to consider the cost. By the way, no member of HIWG profits from recuiting new members to GEnie. It is a worthwhile service that HIWGers can enjoy.

The cost of a Modem, or other equipment to enable your computer to hook up to GEnie and the software to drive the connection should be taken into account. Costs vary so much between types of computer, I really cannot help you here. Mine probably represents the low end: $30.

There is a one-time, initial $30.00 charge to hook-up to GEnie. This includes two hours of hook-up and a couple of how to use GEnie manauals.

Genie costs $18.00 per hour hook-up during prime time (8AM-6PM local time on week-days). During non-prime time the cost for one-hours hook-up depends on your modem:

Baud	Cost
300	$5.00
1200	$6.00
2400	$10.00

If you use mostly mail services, the high speed modems give you an advantage. If you like to chat live, the low speed modems give you an advantage. I presume the higher speed modems cost more.

GEnie may also charge a premium at some phone numbers for the higher speed modems. This varies from area to area.

There seem to be four usable features of GEnie that are useful for HIWGers:

1. E-mail, or electronic mail: this works much like normal mail: except the letter is immediately available to the reciever. It costs more than normal mail if sent to one party. However, HIWG has multiple lines of communication. Rarely is anything said in HIWG that is not useful to several recipiants. It is almost as easy to send a letter to six addresses as it is to one; and the cost is the same! For multiple addresses (say a letter to everyone working in the Sylea Domain) GEnie E-mail is less expensive than regular mail.

2. BullBoard (short for bulletin board): These are places where people post messages for all to read. Currently there several such places devoted to TRAVELLER, MEGATRAVELLER, and HIWG interests. This is a good way to say something to everybody, at a reasonable price.

3. Confab (Also called live-wire conferences): again, this is my title where Confab is an informal term for an informal conversation or chat. I'll try to have a monthly HIWG confab on a different subject each month. The first one, on 4 May was on the subject: The Vargr Invasion of Corridor. While these meetings do not produce a goodly amount of information, it was good to talk to six other parties interested in the subject.

4) Data/Program Transfer: I have yet to enjoy this. But it is possible to upload and download both data and programs. Joe Fugate of DGP is currently placing sector blocks of SS Data where it can be retrieved by any GEnie member. There are also BBSs available for each type of computer where one can get additional programs for their computer or help with problems specific to that type computer.

ATLAS Companion Data

The Universal Planetary Profiles (UPPs) that were originaly developed as companion data for ATLAS OF THE IMPERIUM (GDW) and which are being worked for future release with SECOND SURVEY (SS) will be shortly available for the use of each HIWG Sector Analyst. Distribution of these data began about the first of May. It may be the end of June before each HIWG Sector Analyst receives his/her data - but it is comming!

This data will unleash HIWGian creative data. It was a constraint to creating structure within a sector knowing that SS might erase what ever was created. Now the creative power of the Sector Analysts can be released.

Some of the things HIWG Sector Analysts who have data (some Sector stats have appeared in various locations in past TRAVELLER literature) have done are in the following list. This list is nct exaustive.

1) Create Duchies (generaly sub-sectors), the Duchy capitals, the numbered fleet HQ site and create Dukes/Duchesses and Admiral characters whc hold these posts.

2) Create Counties (4 to 14, usually 6 or 7 per sub-sector/Duchey), County seats, anc Counts/Countesses.

3) Work with Faction analysts to determine the "side" of each created member of Royalty. Remember a noble may wish to support one faction, but may be compelled to support another.

4) Check the outline map: "Droyne Worlds in Charted Space" for Droyne/Chirper planets and assign specific locations.

5) Determine Sector and/or subsector HQs for the MegaCorporations. Determine the impact of Vland's recall of it's three MegaCorporations. Devise any significant non-megacorporations which have a major influence in your sector, or several of your subsectors.

6) Recall that the SS data is as of about 1060, but data is needed for 1116. The size of the planet, it's hydrographic percentage, and atmosphere should not change markedly in 56 years (atmosphere might change one number, if heavy pollutants are being discharged or if a terraforming project is underway). The population could change upward, if the planet was underpopulated to start with (this is probably a rare case). The government type and law level could change during this time (but should probably be limited to 1/3 of the places). The Tech Level should increase slightly: 1 level for 90% of the places, 2 levels for 30% of the places, 3 levels in rare (i.e. explaine why it happened) cases. Because of the expense involved, few places will have increased their type starport (limit this to 10%). In any case, updating Universal Planetary Profiles [UPPs] (or is that UWP= Universal World Profile in MEGATRAVELLER?) to 1116 is a worthy project for Sector Analysts.

7) Not included in the data is the modifiers to the UWP: the units of population, the number of gas giants, etc. You will have to invent this (unless all ready published). For example, I'm interested in the planet Ed in Gushemege sector, a water world with tens of Billions in population. Is that 10 Billion or 90 Billion? I'll have to decide. For the larger worlds in a Sector the population must not exceed that listed in the Sector summary of TD10 (or was that in TD11?).

               -Ed Edwards,
               HIWG Chairsophont

HIWG Till You're Happy!

New HIWG Pubs (order for 10 US cents per page from Ed Edwards, or 8 pence per page from David Lai)

New Analysts:
Core Sector: Fetters
Verge Sector: Eckert
Dulinor Faction: Weimar
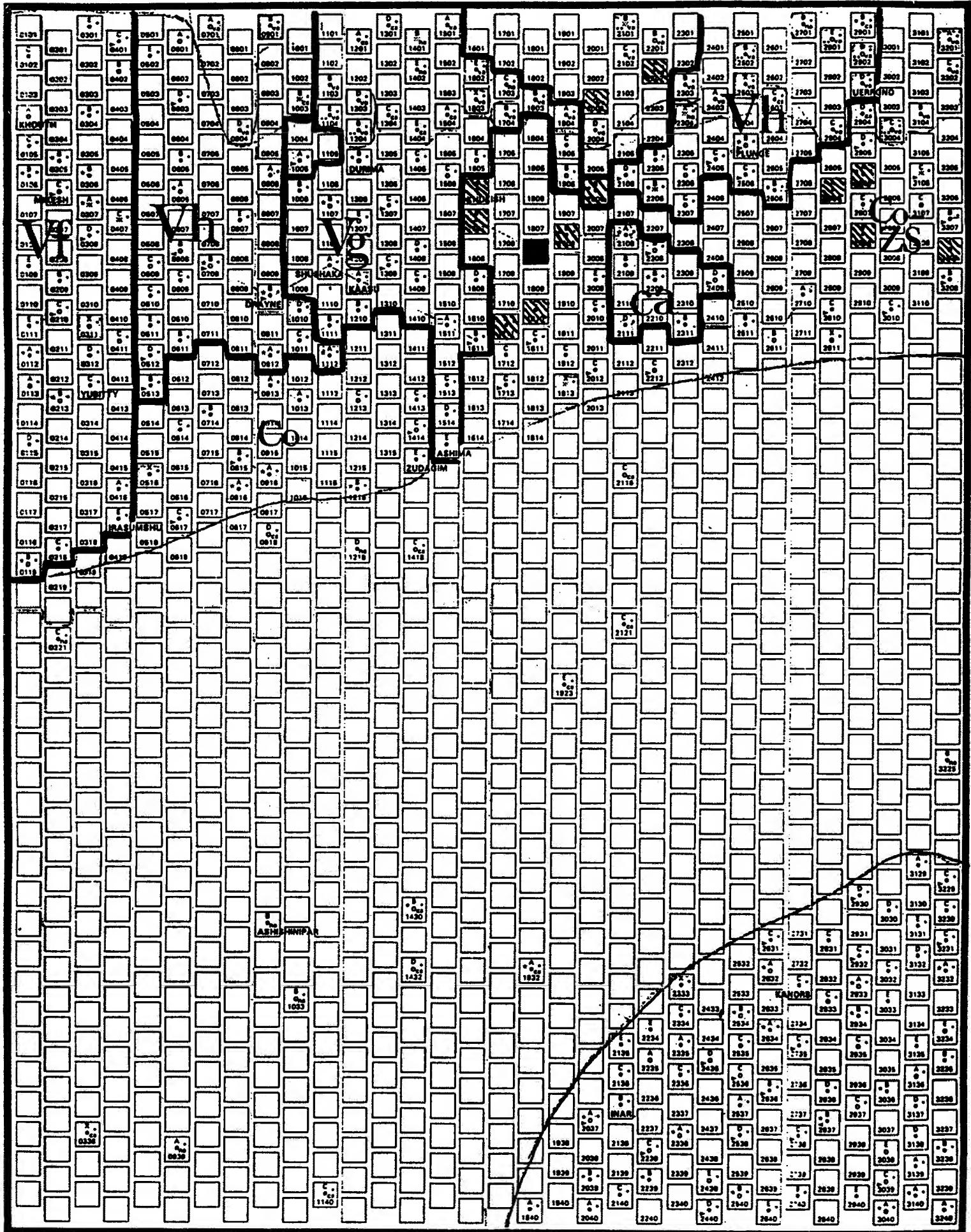
Corridor

VARGR CENTER

Dispatch 057.82

Philip Athens, Vargr Center Analyst

THE INVASION OF CORRIDOR

Below is a timeline for the invasion of the Corridor Sector by forces from Provence. Also included is a map accurate as of 365-1128.

In this timeline, worlds of the Corridor Sector are identified by their hex location only for clarity's sake.

MAP KEY:

ca = Space controlled by the Corsair Alliance

Ca = Areas of intense independent corsair activity. This zone is essentially an anarchic free-for-all of piracy, raiding, petty skirmishes, etc.

Ca-ZS = Site of the Corsair-Ziru Sirka War.

■ = Obliterated world.

▨ = Site of heavy warfare.

This should be fairly self-explanatory. I'll leave more for future dispatches. As always, your comments, suggestions, etc. are more than welcome. I'd like to see this turn into a Challenge or TD article eventually, and if we could work together towards a perfectly mutually agreeable scenario for the fall of Corridor - that would be great!

TIMELINE: The Vargr Invasion of Corridor

132-1116 - 366-1128

1116

132:   Strephon assassinated.
251:   Word of assassination reaches Depot/Corridor by Naval Courier.

349:   Word of assassination reaches Depot/Corridor by X-boat.

1117

025:   Word of assassination reaches Vargr Frontier at 1704.
057:   Vg takes 1462.
073:   Vg takes 1465.
097:   Vg takes 1646.
098:   Vg takes 1705.
115:   Vg takes 1467.
118:   Vg takes 1167.
121:   DA takes 8104.
135:   DA driven off 8104 by Corridor Fleet.
147:   Vg pushed back to 1465.
150:   Battle for Durima begins (Im vs. Vg).
148:   Vg claims all territory coreward of Imperial border.
162:   Vg/Vh clash at 2663, Vg driven out.
163:   DA re-takes 8104.
200:   Battle for Durima ends, Vg pushed back across border.
221:   Transfer order recieved at Depot.
238:   DA takes 8304.
239:   DA takes 810b and 8205.
242:   Corridor Fleet assembles at Depot.
251:   DA takes 8306.
253:   DA takes 8206.
255:   Corridor Fleet crosses into Vland.
263:   Vg re-takes 1465.
281:   Vg re-takes 1646.
285:   DA takes 866b.
287:   DA takes 8307.
288:   Vh takes 2701.
289:   Vh takes 2701.
292:   Vh takes 2365.
294:   DA takes 8667.
295:   Vh takes 2296.
297:   Vg takes 1688.
298:   DA takes 8112.
299:   DA takes 8707.
301:   Vh takes 2206.
304:   Corsair raids on 0716.
306:   Corsair raids on 8816.
307:   Vg takes 1908.
310:   DA takes 878b.
311:   DA takes 8113.
313:   Vh takes 2108.
314:   Corsair raids on 2908.
317:   DA takes 8213.
318:   Vg takes 1107.
319:   Vg takes 2806.
328:   Corsair raids on 8437.
323:   DA takes 8218.
328:   Corsair raids on 8416.
331:   DA takes 8119.

333:   Vg takes 1209 and 8988.
334:   Vh arrive at 2886. Vh-Vg battle for 2886 begins.
337:   Vh takes 2686.
350:   DA engages Corsairs at 8416.
352:   Vh driven off 2886.
356:   DA drives Corsairs off 8416.
360:   Vg engages Vh at 2188. Vg driven off.
362:   Vg takes 8512.
365:   DA turns full concentration to Deneb.

1118

010:   Vg takes 1212.
021:   Vh takes 2208.
038:   Vh takes 2111.
033:   Vg-Vh war for 2282 begins.
038:   Corsair unit employed by Vg rebels at 2886.
049:   ex-Vg Corsairs take 2188.
058:   Vg attacks 2886.
       Full scale 3-way war in subsector C begins between Vg, ex-Vg Corsairs and Vh.
062:   Vh takes 2311.
065:   Vg takes 1711.
079:   Vg takes 1112.
101:   1888 obliterated.
107:   Vg attacks Depot from 1209 and 1711 simultaneously.
138:   Vg takes Depot.
148:   Vg takes 1515.

Sector settles into long-range war as rival Vargr governments and Corsair units fight over the spoils.

1119

027:   Vh drops out of DA, opens second front on Vg.
062:   Several Corsair units join ex-Vg, form CA
088:   CA takes 2111.
100:   CA begins to push coreward and spinward.
120:   New border disputes between Vh and Vf close second Vg front.
213:   Major Vh offensive from spinward begins. Vg put on defensive.
300:   Vh offensive stopped, Vh has taken 8718, 8912 and 1112.
353:   Vh driven back to 2886 by CA.

1120

001:   Vf/Vh agree on safe boundary through subsectors A and E.

Throughout 1120 - Vh and CA squeeze Vg.

066:   Major Corsair invasion into Vland.
112:   Corsairs pushed back into Corridor by Ziru Sirka.

Throughout remainder of 1120 - Ziru Sirka/Corsair wars in subsector D.

300:   To boost moral, Vg renames Corridor: Llananaa Toerz (The Devoured Sector).

+ + +

KEY: Vg = Glory of Taarskoerzn (a militaristic Vargr government from Provence Sector. Heavily influenced by the Church of the Chosen Ones. "Birthplace" of Oekhaos. Employs several Corsair units as mercenary forces.)

Vh = Irrgh Manifest (a relatively large Vargr government from the rimward fringes of Provence. Heated enemy of the Glory of Taarskoerzn. Split by Vg into to sections. One to spinward and one to trailing. The two sections quickly took on their own goals and personalities - the spinward side joining with the Dzarrgh Federate in the Destiny Alliance, the trailing side, invading into Corridor independently.)

Vf = The Dzarrgh Federate (a powerful Vargr government from Provence and Tuglikki Sectors. Most concerned with fighting Norris in Deneb Sector. Joined with spinward section of Irrgh Manifest to form anti-Norris Destiny Alliance.)

DA = Destiny Alliance (a hastily-constructed alliance between the spinward section of the Irrgh Manifest (Vh) and the Dzarrgh Federate (Vf).)

CA = Corsair Alliance (formed when several independent corsair bands joined the Vg mutineers. Began fighting forces of both Vg and Vh for control of worlds around 2886 - between Vg and Vh territory.)

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TRILLION CREDIT SQUADRON:
Campaign Rules for the Rebellion
By Charles Scott Kimball

Charles' latest project is a System Survey article for the Antares star system. Discussion of that among WINGers and GEnie participants is intriguing. Progress on it was interrupted a bit by my request that he push this TCS article along. The information here may aid in developing the Massilia Project. It might also have some bearing on large scale interstellar war rules Tim Koors is looking into for DGP.

In this article, you will also find MegaTraveller rules for the dreaded A-PAWS device (JTAS #20). I requested this in TS#4 originally in the context of a terror weapon Lucan might use. — MM

I. Revenue

Rather than force players to figure out the revenue coming from every world of the Imperium, I have calculated some rough figures on the amount of money available to each faction, using the population figures given for each sector in Digest #10. It is assumed here that every world is on a wartime budget by the end of 1117.

Faction	Funds in 1117	Maximum Annual Revenue, 1118-1125
Antares	3762	613
Aslan	201	151 (see note 2)
Assembly	120	12 (see note 3)
Daibei	4270	695
Dulinor	7660	1247
Gateway	3165	405
Julian Protectorate	10213	1023
Lucan	27511	4065
Margaret	2888	847
Norris	11233	777
Solomani Confederation	15708	4860
Rift Republic	82	8
Strephon	2516	410
Vargr	2740	(see note 4)
Vega	11065	324
Vland	4438	(see note 5)
Zhodani	6400	640

Notes on the above figures

1. The first number is the amount in trillions of credits (TCr) available to each faction in 1117; the second figure is the maximum available income for every year after that. At least half of the starships must be tech level 14 or less; this reflects what comes out of naval depots and reserve fleets. As for the yearly income, parts of it will be lost as a result of enemy conquests, sieges, and bombardments; the actual battles will determine how much is actually lost here. But in any case, don't expect an entire faction's fleet to appear in one battle — its enough of a job to manage a trillion credit squadron, let alone a quadrillion credit one! Furthermore, in this free-for-all situation most of the factions are fighting many enemies at once, which prevents them from concentrating everything they have in one place.

Once the revenue is collected from the taxpayers, it must be delivered to a shipyard before it can be used. This can be a problem when the world is besieged by pirates or unfriendly navies. To keep bookkeeping simple, assume that the taxes are delivered automatically unless a world is blockaded on the last day of any given year (e.g., 365-1117). All revenue is handled by electronic credit transfer, so there are no gold-laden "galleons" for pirates to plunder. If taxes

cannot be delivered, the money is usually wasted (pg. 8 of TCS) unless it can be spent in the planetary navy.

2. The Aslan figures are multiplied by the number of major clans participating in the Trojan Reach campaign (maximum of 23 — at least six of the big clans will stay out of it because they are more concerned with possible Solomani & Zhodani threats.) In addition, up to 95 TCr will be available each year after the Trojan Reach is conquered.

Many of the Aslan ships and troops will come from the main body of the Hierate. Since they have to be transported across the Great Rift, expect an additional 1-year delay before they arrive at the front.

3. The figures given for the Assembly should not be used as guidelines for the original fleet's size; they are based on the revenue of Khuur Lia, the client state supporting it in Ley subsector L. More will be available from Imperial worlds plundered.

4. The Vargr revenue initially comes from the Provence and Meshan sectors. Since the corsairs are not supported by one state like the Imperial factions, yearly revenue after 1117 will vary greatly, as Vargr states rise and fall, or simply choose to increase/decrease donations to the Vargr fleets. To simulate this, roll twice every years (once for Provence, once for Meshan), in the following manner to determine what funds become available:

$$(4D-4) \times TCr \ 13.7$$

Vargr fleets, like the Assembly, cannot collect revenue from captured Imperial worlds in the form of taxes. Instead, they plunder worlds, gaining 20 times the normal annual revenue a world produces. Once a world is sacked, however, planetside life will become so difficult that no further revenue for any faction can be given until it recovers in the post-1125 era.

5. Vland has for annual revenue a maximum of TCr 1512 per year for 1118 and 1119, and TCr 722 for each year after that. The extra TCr 1782 is the contribution of the three Vilani bureaux when they move their assets from other sectors to Vland. Most of the ships produced with this money will not be warships, but commercial transportation, with a few Q-ships, armored merchants, and surplus military vessels to escort the rest. This rule reflects the source of the bureaux funds ("The trouble with capital ships is that they tie up capital!").

II. Building Ships

In TS#1 is a table showing the number of ships available to most of the factions from year to year. Here we have statistics like "Dulinor has 2800 ships to start with" and "Antares has 100 ships left when the fighting ends.". Before we go on from here we should determine just what defines a "ship." Is it any ship cruiser-sized or larger? Do destroyers and other small war ships count? What about armed non-starships like battle riders, monitors, and SDBs? And how many support ships are needed to keep a navy in top condition? From what I have read in "The Rebellion Sourcebook" and HIWG correspondence it appears that the best definition of the term "ship" is a fully armed naval vessel with a jump drive; consequently a battle-rider tender with battle-riders will count as one "ship" because only the mother ship has a jump drive. Thus the bulk of a faction's fleet does not appear on the table, since most of the escorts (armed ships that displace under 1000 tons), SDBs, monitors, fighters, support vehicles and maybe even the carriers don't fit the "ship" definition. Since the big ships cost hundreds of billions of credits and can take as long as 5 years to construct, some factions will choose to build only smaller ships when the Rebellion becomes a long-term war of attrition. That is probably the main reason why most of the battleships destroyed are not rebuilt again later, even

when a big shipyard in a safe location is available.

Every fleet needs a large number of support vehicles that you normally don't hear about to maintain itself: fleet couriers, tankers, troop transports, hospital ships for the wounded, and repair tenders to fix battle damage. It is recommended here that at least half of a fleet's tonnage be devoted to support vehicles. A fleet that is made up of nothing but battleships will burn itself out in only a few battles, so you are safe if you can avoid being the first target it gets mad at!

A large part of a faction's budget, sometimes as much as 50%, will go into planetary navies. To determine the size of a planetary navy without building every SDB, use the following table:

World Population Table	Number of System Defense Boats (SDBs)
6 or less	None
7	1
8	5-12 (1D8+4)
9	50-200 (3D6*10)
10	500-1000 ((1D6*100)+400)

The above figures are for frontier sectors like the Spinward Marches, where any Imperial world that can afford SDBs will have them. Worlds in other sectors may choose to do without a planetary navy, relying on the Imperium to defend them instead (See Craig Sheeley's article on open/closed planets in TS#1). Or some faction leaders (Lucan, for instance) may choose not to allow a world to be too heavily defended.

Under-populated worlds, or those with a tech level below 7, may be defended by small craft and other vehicles brought in by starships, or a squadron may simply be stations permanently in one system. Most worlds with a population level and a tech level of 5+ will have a Close Orbit and Airspace Control Command (COACC), whether or not a planetary navy is present; details on that, as well as on the local ground forces, have already been covered in "COACC" and "The Rebellion Sourcebook".

Taking all of the above factors into account, the typical Imperial faction's fleet will consist of the following:

Support Vehicle	25%
Warships, TL 15	12.5%
Warships, TL 12 to 14	12.5%
Planetary Navies and everything else	50%

Not all fleets, particularly alien ones, are constructed the same way. Use the special rules below for constructing the fleets of each faction (note that some of these may be superseded by Mike Jackson's "Flashback" module).

1. Antares & the Julian Protectorate: The alliance between these two states from 1117 to 1119 allowed their naval architects to share shipbuilding techniques. This allows Antares and the Julians to consider each other's shipyards as friendly for purposes of building/repairing ships (see page 38 of TCS). Unfortunately, the alliance does not last long enough for the Julians to build many TL 15 ships.

In the post-1125 era it may be possible for the League of Antares to use TL 17 ship components, if a diplomatic mission can open up interdicted Sabmiqys first.

2. Aslan: All Aslan starships should carry a "Shrine of Heroes" for purposes of meditation. This does not have to take up much space — usually a small stateroom per thousand tons displacement will do. Also note that Aslan seem to hate straight lines; in many pictures of Aslan vehicles I can't tell if they're coming or going! This probably will not make a

different in designing ships, but keep it in mind when drawing their deck plans.

The personal attitude Aslan take towards conflict plus an eagerness to get involved in it should make the job of fighter pilot very desirable to them. I have not seen an Aslan fighter or carrier in any Traveller work, so I have designed an Aslan carrier and fighter, plus a fuel shuttle for refueling both. These will be made available through HIWG Pubs.

At first the Aslan will be limited to a maximum of TL 14, but after 1128 they will be able to build TL 15 ships in captured shipyards like those at Tobia (see the section on control of worlds and starports).

3. The Assembly & Dulinor: Over half of the Assembly's ships, and as many as 10% of Dulinor's, will have Suerrat crew members. Psychologically this minor human race is less disoriented by zero-G than most of us; consequently their ships may do without grav plates if maximum acceleration is 2 Gs, and they will dispense with inertial compensators if the ship only does 1 G. Since Suerrat prefer orbital colonies to setting foot on a planet's surface, their ships are usually unstreamlined (configuration 7-9), with small craft to handle the occasional planetside excursion they may have to take.

4. Lucan & Margaret: There are more than a few TL 16 worlds within their territories, so some of their ships (perhaps as many as 10%) will have TL 16 components. Margaret's fleets will have a very high percentage of support vehicles, thanks to the Curator Corps.

5. Solomani: Confederation warships are designed like Russian tanks — they have everything but comfort! Most Solomani crew members will use bunks and small staterooms to save space and money. All ships will carry marines & SolSec agents to insure loyalty.

As with the Aslan, after 1128 the Solomani will have captured and retooled enough Imperial shipyards to build TL 15 vessels of their own.

6. Vargr: Fleets constructed by Vargr tend to be composed of many little ships, rather than a few big ones. This is because it takes at least three years to construct a ship large enough to carry a spinal mount (page 33 of TCS), and it is asking a lot for a Vargr government to last that long; moreover, a lot of Vargr states do not have the funds to finance large starships. Vargr corsairs the size of the 10,000-30,000 ton designs in "The Rebellion Sourcebook" should be a rare sight, especially if they come from balkanized worlds. The Imperial Admirals along the Vargr frontier are more likely to run into a hornet's nest of type VP corsairs.

Like their robots, Vargr ships may, and often do, contain components manufactured on many worlds with varying tech levels. One possible method of simulating this might be to roll one die as follows for each of the ten systems on board (hull, power, loco, common, sensors, weapons, screens, life support, controls and miscellaneous):

1	=	Design TL - 2
2	=	Design TL - 1
3-4	=	Design TL
5	=	Design TL + 1
6	=	Design TL + 2

7. Vega: These ships are a lot like their human counterparts, but the dry, 0.5 G environment of Muan Gwi will make a different in life support requirements. One way to simulate this would be to double the power consumption of the inertial compensators and halving the power consumption of grav plates.

In JTAS #20 there was a proposal for an antimatter particle accelerator (called an A-PAWs or V-gun for short). Not long after that Ed Edwards and Craig

Sheeley did a series of articles in "The Imperium Stable" on how a fleet composed of 48 medium-sized cruisers and 1 megadreadnought with a V-gun would serve as an excellent defensive system, bringing an end to the old "battleships vs battleriders" controversy. They then went on and proposed distributing nine such fleets along the Solomani frontier. For those who don't have JTAS #20, here are the rules for the V-gun, modified to be compatible with MegaTraveller:

TL	Power	Volume	Weight	Price MCr
15	750000	2700000	600000	300000
16	375000	1350000	300000	150000
17	175000	675000	150000	75000
18	125000	270000	60000	30000

Threat the V-gun as a type T particle accelerator to determine the chances of hitting a target. If a ship is hit, the only screen that can save it are a black globe, white globe, or a proton screen. If the target has none of the above, or if all of those screens are penetrated, the target is GONE (the "V" in V-gun stands for vaporize"). To penetrate the screens, roll a 10-sided die for a black globe generators and a 6 sided die for each white globe and proton screen. If any of those die rolls are less than or equal to the screen's factor number, the deadly anti-particles have been stopped. A sufficient number of hits on a planetary surface (the JTAS #20 article proposes 1 per hex for a vacuum world, twice as many if an atmosphere is present) can turn a world into an asteroid belt.

Note: The A-PAWS is a widely known variant, but not an official part of the MegaTraveller universe at this time. Each referee must decide for himself whether to allow the A-PAWS in his campaign. For my own campaign I am proposing that the plan to patrol the Solomani frontier with MNDs was partially complete when the Rebellion started. In this case, one megadreadnought was completed in 1113, and it was used at first to patrol the Banasdan & Arcturus subsectors. It came under control of Vega in 1117, and was destroyed by the Solomani at some time between 1117 and 1119, because any ship with a V-gun automatically becomes a primary target for the enemy to take out. (A "Sink-the-Bismark" type mission to destroy the MND would make a good TPA for Solomani characters.) A second MND was scheduled for completion in 1118, but raids on Imperial shipyards may delay or prevent completion altogether. If you want to use the A-PAWS, there is a design for the MND included in my HIWG pub on ship designs (plug, plug).

III. Planetary Defenses

Because of the open/closed planet rule, defenses of planetary surfaces will be a rare sight, but some local governments will be security conscious/paranoid enough to have them. Usually this means deep meson guns, laser and missile batteries. In addition to shooting orbiting targets, they are useful as point defenses, picking off incoming missiles. If they are present, use the planetary TL to determine what is available, and provide enough computers and control panels to operate everything. It is usually not necessary to buy a separate power plant if the needed energy can be diverted from non-essential civilian services. Up to 10% of a world's revenue may be spent on planetary defenses rather than SDB's When resolving attacks between ships and planetary defenses, treat the planet as a huge configuration-5 target (8 or 9 for asteroids) with no agility and a size DM of -3. 45% of the planetary defense batteries may bear on a target at far orbit range, and 25 if the targets altitude is less than 50,000 km — targets beyond 500,000 km are out of range. To hit a target on the ground, the attacking player must state he is aiming for one before rolling; otherwise his

shots will hit oceans, mountains, etc, and generally have no effect on the defender. Treat surface defenses as having armor equivalent to 5 x the local TL, whether it is crystaliron shields, sandbags, or whatever. In any case the only thing that can put a deep meson gun out of action, short of blowing up the planet, is to hit it with another meson gun. See pg. 72-73 of "COACC" for more rules on ground-to-orbit combat.

It is also possible to protect planetary targets with passive defenses like nuclear dampers or meson screens — use the volume of the area protected to determine energy costs, if necessary. A planet protected by a black globe is absurd.

IV. Orbital Bombardment

So far, most of the factions in the Rebellion have observed the open/closed planet rule, making this section unnecessary. There have been exceptions, though, like pirates from outside the Imperium, the Brinn, and Lucan's admiral who would rather destroy a planet than let Dulinor have it, so here is how to simulate events like that.

To start with, I am borrowing a table from "Fifth Frontier War" to simulated the effects of bombardment on planetside troops:

Die Roll				Total Bombardment Factor						
	1	3	6	12	18	24	30	36	42	48
-2	20	30	30	40	40	50	50	50	50	50
-1	20	20	30	30	40	40	50	50	50	50
0	10	20	20	30	30	40	40	50	50	50
1	10	10	20	20	30	30	40	40	50	50
2	—	10	10	20	20	30	30	40	40	50
3	—	—	10	10	20	20	30	30	40	40
4	—	—	—	10	10	20	20	30	30	40
5	—	—	—	—	10	10	20	20	30	30
6	—	—	—	—	—	10	10	20	20	30
7	—	—	—	—	—	—	10	10	20	20
8	—	—	—	—	—	—	—	10	10	20

Die Modifiers

TL	Modifier	Atmosphere	Modifier
15+	+2	breathable	0
13-14	0	tainted/hostile	-1
11-12	-1	vacuum	-2
9-10	-2		
8-	-3		

For example, a 30-factor attack on a TL 13 world with a tainted atmosphere will eliminate 20% of the local troops on a die roll of 5; for more attacks like that will leave the world defenseless. Approximately 4,000 HE missiles equal one bombardment factor; 1 hit by nuclear missiles, antimatter missiles or spinal mount weapons counts as 20 HE missile hits when figuring the total bombardment factors. Particle accelerators cannot be used if the planet has an atmosphere.

Civilians may be hit by bombardment of military targets. When using HE missiles there are rarely enough civilian casualties to bother counting them, but it is another story with the other weapons mentioned above. If the attacking player does not specifically say he is aiming for a planet's cities, roll the planet's population level or less for them to be hit anyway. For simplicity's sake, let's assume each hit by nuclear/antimatter missiles or by spinal mount weapons causes 100,000 civilian casualties, with double or triple results if the atmosphere is not breathable. Really heavy bombardment will cause fallout, 1-6 years of nuclear winters, and temporary or permanent changes in the planet's albedo.

If a planet's population level is 5 or less, any bombardment will automatically eliminate the starport.

On more crowded planets there will be many starports of different grades of quality, so every time population is reduced one level by bombardment (level 8 or 7, for instances), reduced the quality of the main starport by one better, like from type A to type B. Reducing a type A, B, or C starport will also lower the tech level accordingly. Finally, such a calamity may cause a revolution the ground, with changes in the planetary government & law level, but that's beyond the scope of this paper.

If there is a planetoid belt in the system, planetoid can be used as a cheap, clean substitute for nukes. If this is done, let the referee figure out how long it takes to get the "flying rocks" to the target, how many ships are needed to move them, and how much damage is caused by a planetoid of a given size moving at a given speed.

Sometimes an attacker will just blockade a world from outside contact, rather than pound it into a radioactive wasteland. This won't affect worlds with a type D, E, or X starport much — they're largely self-sufficient to begin with — but the technology of more advanced worlds will suffer greatly. For every year in which a planet is under siege, roll the population level or less to avoid losing a tech level. If the tech level drops below the level needed to sustain life (7 on vacuum worlds, 5 in hostile atmosphere, and 3 in tainted atmospheres), the entire planetary population may die.

V. Picking Up the Pieces

After a planetary battle, tech levels lost by bombardments/sieges will be recovered at a rate of 1-6 years per TL, assuming there were not permanent changes like a destroyed starport. In no case will a world's TL exceed its 1116 value until the post-1125 era.

New starports may be built at a price of Cr (600,000 ✕ the population level ✕ the quality rating). The quality rating equals 1 for a type E starport, 2 for a type D, 3 for a type C, 4 for a type B, and 5 for a type A. On high population worlds, there must be at least one port for every 5 billion people. Starports on barren worlds cost the same as those for population level 1 worlds.

The above prices are just for the planetside complex. Type A-C ports (and sometimes D) require an orbital complex as well. It is beyond the scope of this article to figure out the cost of every feature in a space station, so use the articles on orbital colonies in JTAS#23 or TD#1 to figure out the price for them.

It is not possible to save credits by upgrading an existing starport; in most cases when a new starport is build, the old one is kept in use for local traffic or special occasions. Examples of this behavior include Fisher's World in High Passage #5 and Shudusham in TD#8.

The 548-week waiting period mention for use of captured shipyard on page 38 of TCS should only be used in the Rebellion when an Imperial shipyard is captured by an alien faction, or visa-versa. When one Imperial faction captures the shipyard of another (e.g., Antares vs. Lucan), it can be used to both build and repair ships after just 24 weeks of retooling. This reflects the fact that all Imperial factions start out it the same kind of equipment to begin with. After 1125, however, it will be a different story. By then changing tech levels, new ship designs, etc. will have significantly altered the composition of each fleet, making every faction's vehicles and shipyards incompatible with those of other factions. In that age any shipyard captured by another faction will require the full 548 weeks of retooling before it can be put to full use.
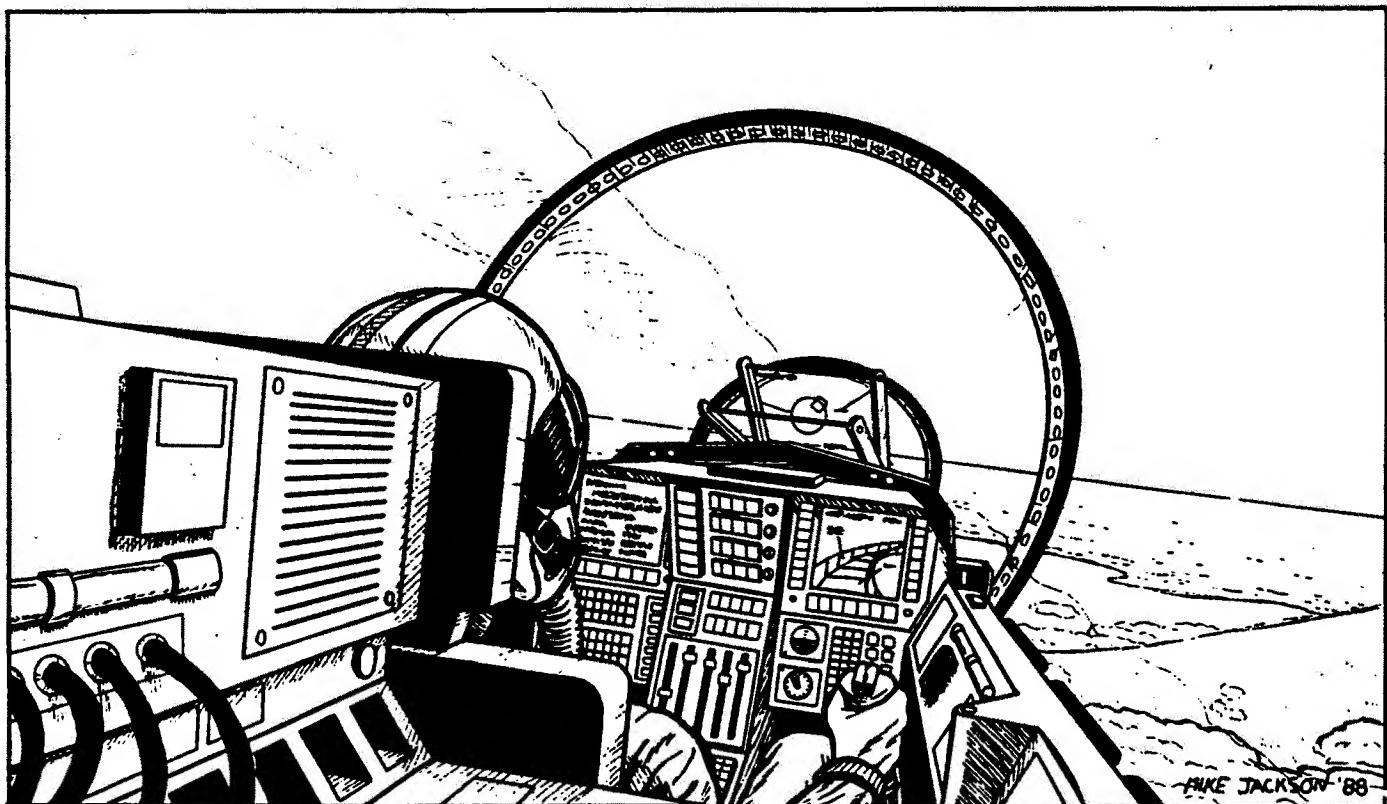
MIKE JACKSON '88

FACTION GOVERNMENTS
By Mike Jackson

Those of you that have not yet noticed, Mike has broken into doing art of Travellers' Digest. His work can be found throughout Digest #16.

This is the first installment of several hierarchies Mike has sent. I expect to space these out over the next few issues. - MM

1. The Imperial Government

```
  ┌────────┐       ┌──────────┐
  │  Moot  │ ·-->  │ Emperor  │
  └────────┘       └──────────┘
                        │
                   ┌──────────┐
                   │ Cabinet  │
                   └──────────┘
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```
┌──────┐  ┌──────────┐  ┌──────────┐  ┌──────────┐  ┌──────────┐  ┌──────┐  ┌──────┐
│ SPA  │  │ Ministry │  │Archdukes │  │  Naval   │  │ Marines  │  │ Army │  │ IISS │
└──────┘  │    of    │  └──────────┘  │   High   │  └──────────┘  └──────┘  └──────┘
          │ Justice  │  ┌──────────┐  │ Command  │  ┌──────────┐
          └──────────┘  │  Dukes   │  └──────────┘  │ Imperial │
          ┌──────────┐  └──────────┘  ┌──────────┐  │  Guard   │
          │   JSB    │  ┌──────────┐  │Fleets and│  └──────────┘
          └──────────┘  │  Counts  │  │ Reserve  │
                        └──────────┘  │  Fleets  │
     ┌──────────┐  ┌──────────────┐   └──────────┘
     │ Planetary│  │ Marquis and  │
     │  Courts  │◄─│ other plane- │
     └──────────┘  │ tary rulers  │
                   └──────────────┘
                        │
                   ┌──────────┐
                   │  System  │
                   │ Squadrons│
                   └──────────┘
                           ┌──────────────────────┐
                           │ Planetary Armies     │
                           │ including Wet Navies  │
                           │ and Air Forces        │
                           └──────────────────────┘
```
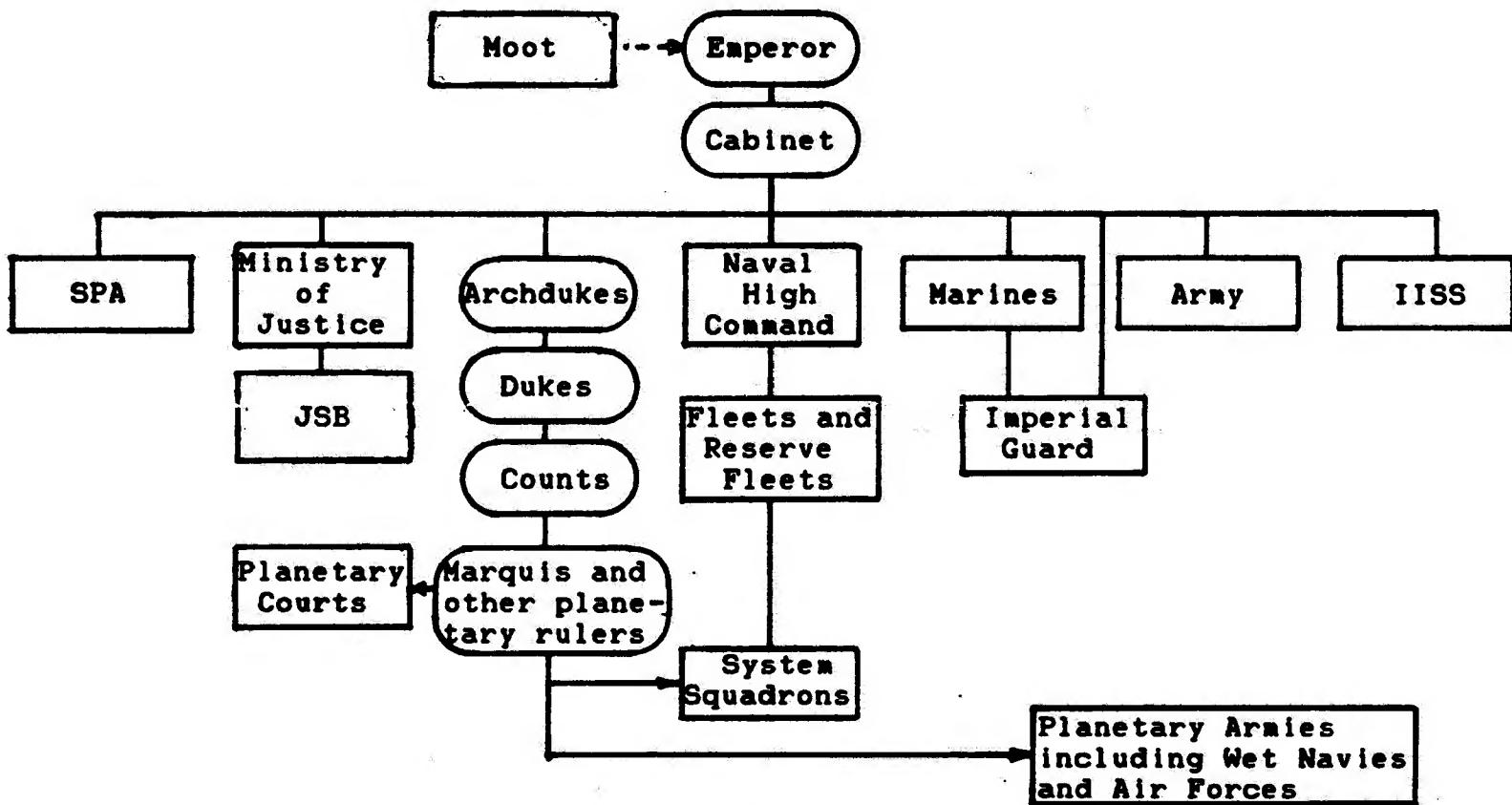
Diagram Notes: Squares represent organizations or services. Elipses represent individuals and their supporting beaucracy. SPA: Starport Authority - administers all starports. Ministry of Justice - deals with High Justice crimes (treason, genocide, etc) and dictations general Imperial legal policy. JSB - The Ministry of Justice Special Branch, the Imperium's Secret Service. Cabinet - The Emperor's advisors and ministers. There are some fifty ministers, all nobles from the Moot. Examples are minister of defense, minister of external affaris, minister of transport, etc. For more details, see "Imperial Government," Third Imperial #8.

2. Lucan's Imperium

```
                  Moot            Emperor
                                                      Cabinet

   SPA       JSB                 Naval      Marines    Army        IISS
                                 High
                                 Command
          Ministry    Dukes
          of                    Fleets and  Imperial
          Justice    Counts     Reserve     Guard
                                Fleets

  Planetary   Marquis and
  Courts      other plane-
              tary rulers        System
                                 Squadrons        Planetary Armies
                                                   including Wet Navies
                                                   and Air Forces
```
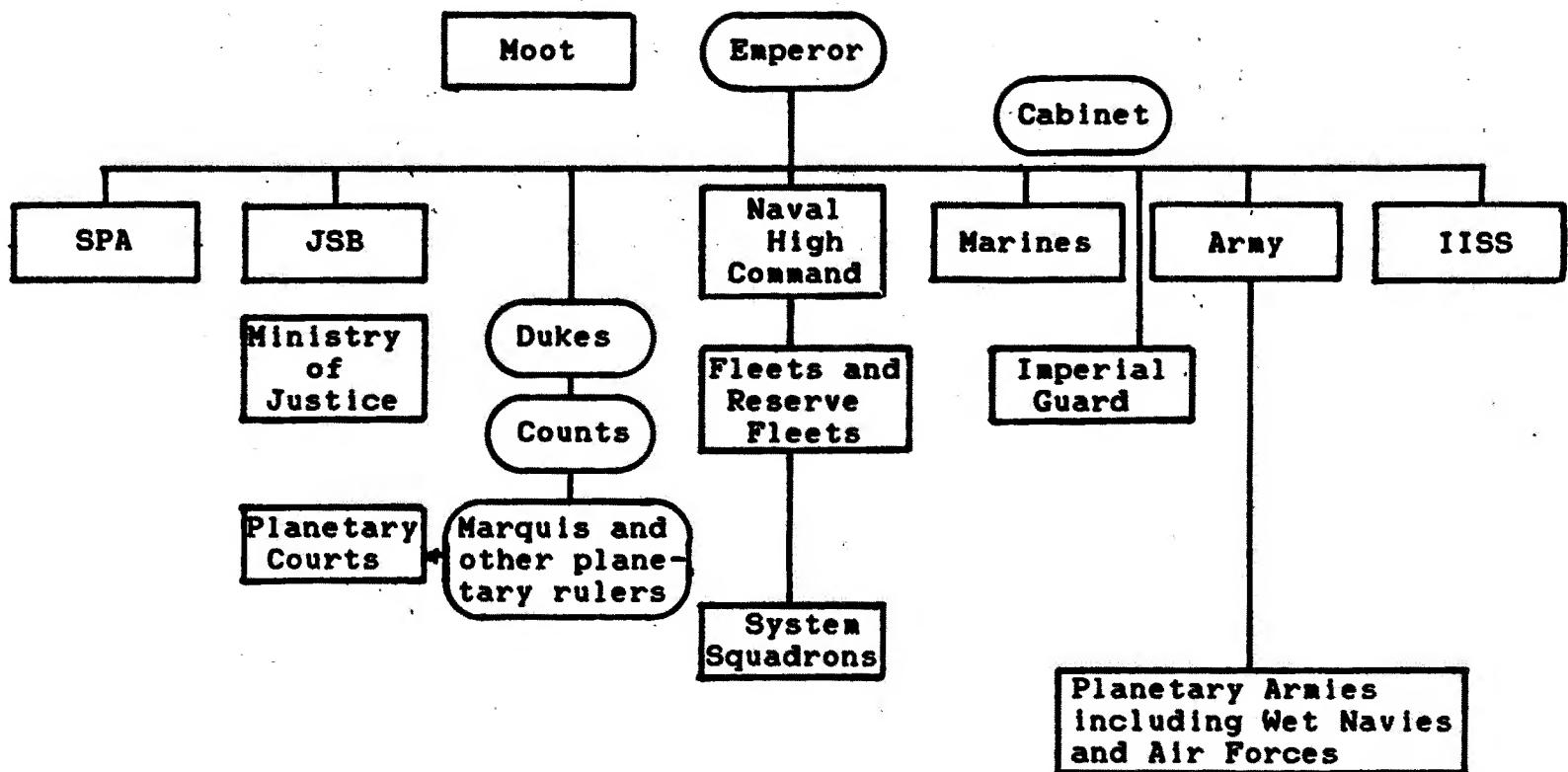
Diagram Notes: Officially, the government still functions as in table 1. This represents the actual state of government. Lucan has centeralized control, directly as much as possible.

3. Domain of Deneb

```
                           Norris

                        Naval Command
                        (Sector)

   SPA     Dukes    Fleets and    Marines    Army    IISS    DINI
                    Reserve
          Counts    Fleets

       Marquis and
       other plane-
       tary rulers    System
                      Squarons
                                          Planetary
                                          Armies
```
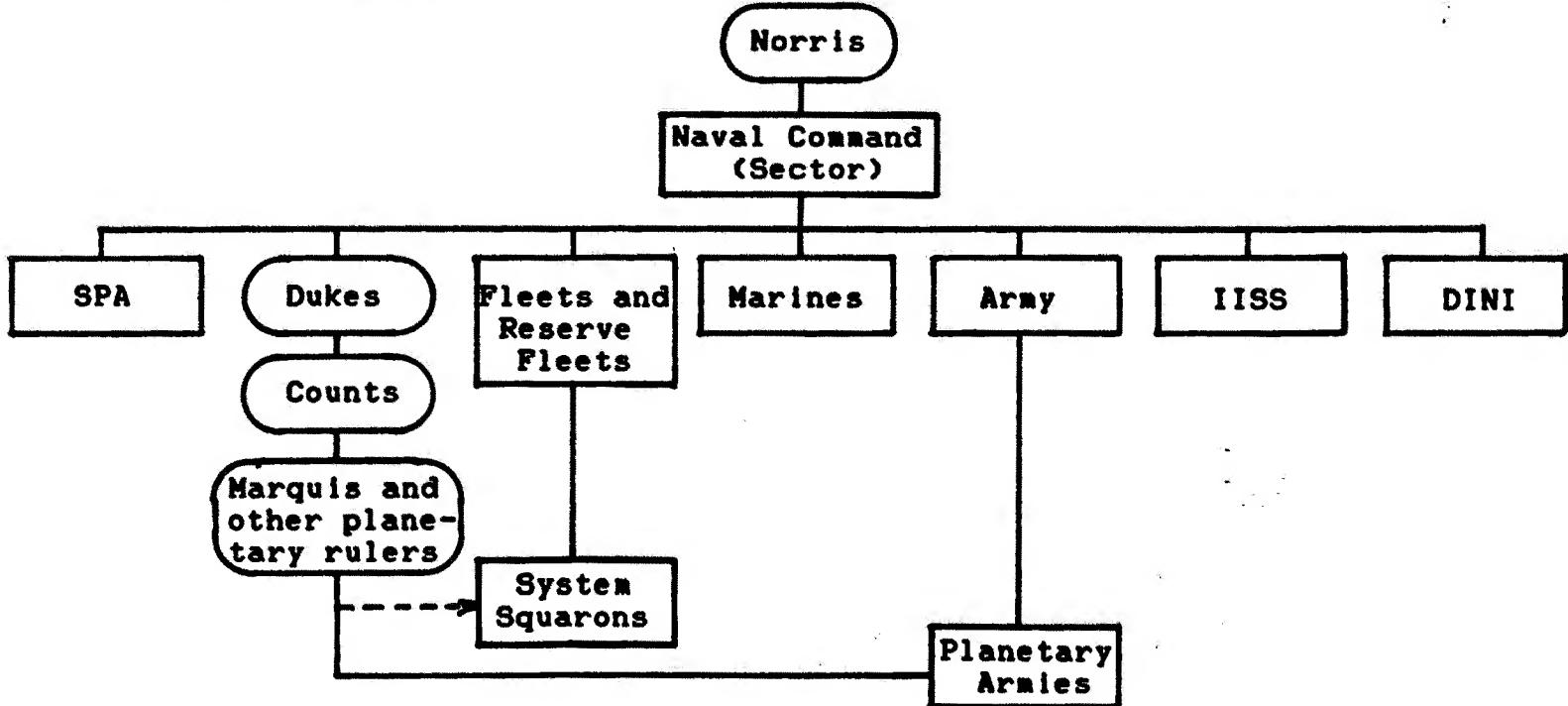
Diagram Notes: Norris' government is similar to wartime government, all under Naval control.

FIRST CLASS

TO:

Background for Continuing Adventures in the Imperia